

This listing of claims will replace all prior versions, and listings, of claims in the application:

**LISTING OF CLAIMS:**

1. (Currently Amended) ~~Electroplating~~ An electroplating solution for copper comprising  $\text{CuSO}_4 \cdot 5\text{H}_2\text{O}$ ,  $\text{H}_2\text{SO}_4$ ,  $\text{HCl}$ , ~~Polyethyleneglycol (molecular weight >200)~~ polyethylene glycol with a molecular weight greater than 200, hydroxyl amine sulfate, and hydroxyl amine chloride ~~and if necessary further additives~~.
2. (Currently Amended) ~~Solution~~ A solution according to claim 1 further comprising  ~~$\text{Cl}^-$~~   $\text{Cl}^-$  ions in a range of 50 – 150 ppm and the hydroxyl amine sulfate in a range of ~~0.01~~ 0.01 – 5 g/l.
3. (Currently Amended) ~~Solution~~ A solution according to claim 1 further comprising  ~~$\text{Cl}^-$~~   $\text{Cl}^-$  ions derived at least from HCl in a range of 55 – 125 ppm.
4. (New) An electroplating solution according to claim 1, further comprising an additive.
5. (New) A solution according to claim 4, wherein the additive is thiourea, molasses, glucose, tribenzylamine, benzotriazole, naphthalene sulfonic acid, or  $(\text{NH}_2\text{OH})_2 \cdot \text{H}_2\text{SO}_4$ .

6. (New) An electroplating solution made by comprising:

$\text{CuSO}_4 \cdot 5\text{H}_2\text{O}$ ;

$\text{H}_2\text{SO}_4$ ;

$\text{HCl}$ , and

optionally an additive; and

polyethylene glycol with a molecular weight greater than 200, and either hydroxyl amine sulfate or hydroxyl amine chloride.

7. (New) An electroplating solution comprising:

$\text{CuSO}_4 \cdot 5\text{H}_2\text{O}$ ;

$\text{H}_2\text{SO}_4$ ;

$\text{Cl}^-$  ions, and

polyethylene glycol with a molecular weight greater than 200.

8. (New) An electroplating solution according to claim 7, wherein the concentration of  $\text{CuSO}_4 \cdot 5\text{H}_2\text{O}$  is 60 – 150 g/l,  $\text{H}_2\text{SO}_4$  is 80 – 150 g/l,  $\text{Cl}^-$  ions are 50 – 150 ppm, polyethylene glycol is less than 100 ppm, and optionally an additive.

9. (New) An electroplating solution according to claim 7, further comprising hydroxyl amine sulfate or hydroxyl amine chloride.